

ABSTRACTPOLYKETIDES AND THEIR SYNTHESIS

A polyketide synthase ("PKS") of Type I is a complex
5 multienzyme including a loading domain linked to a
multiplicity of extension domains. The first extension
module receives an acyl starter unit from the loading
domain and each extension module adds a further ketide
unit which may undergo processing (e.g. reduction). We
10 have found that the Ksq domain possessed by some PKS's
has decarboxylating activity, e.g. generating
(substituted) acyl from (substituted) malonyl. The CLF
domain of type II PKS's has similar activity. By
inserting loading modules including such domains into
15 PKS's not normally possessing them it is possible to
control the starter units used.